

CLAIMS:

1. A system for providing enhanced security and convenience for passengers in a public transportation terminal (10), comprising:
 - means for acquiring passenger data at check-in time;
 - means for entering said acquired passenger data into a database (51) associated with said public transportation terminal (10);
 - means for issuing said passenger a wireless device (53);
 - means for transferring said acquired passenger data from said database (51) to said issued wireless device (53);
 - means for optically transmitting positioning data and passenger convenience data to said issued wireless device (53); and
 - means for transmitting a radio frequency (RF) warning signal (59) from said issued wireless device (53) when a security violation is committed by said passenger.
2. The system of Claim 1, further comprising means for generating one of an audible and/or visual security violation warning signal from said wireless device (53) when said passenger commits said security violation.
3. The system of Claim 1, further comprising means for encoding said optically transmitted positioning data (60).
4. The system of Claim 1, wherein said security violation is one of said passenger entering an unauthorized area and arriving at an incorrect terminal gate.
5. The system of Claim 1, further comprising means for encrypting said acquired passenger data.
6. The system of Claim 1, further comprising means for periodically changing a code for encoding said optically transmitted positioning data (60).

7. The system of Claim 1, wherein said wireless device further includes means for detecting a change in said optically transmitted positioning data.

8. The system of Claim 1, wherein said acquired passenger and travel data stored in said database (51) includes at least one positive passenger identification means, at least one item pertaining to passenger personal data and passenger ticket information.

9. A system for providing enhanced security and passenger convenience in a public transportation terminal (10), the system comprising:

(a) a central processor (50) associated with said terminal configured to:

1. generate positioning data;
2. generate passenger convenience data;
3. encode said positioning data; and
3. periodically implement a code change for encoding said

positioning data;

(b) a plurality of data distribution lighting elements (28), coupled to said processor (50) and adapted to optically transmit said positioning and passenger convenience data from said processor throughout said public transportation terminal (10);

(c) a plurality of wireless devices (53), each device including an optical transceiver (53a) configured to receive said optically transmitted positioning and passenger convenience data (60) from said plurality of data distribution lighting elements (28) and a radio frequency (RF) transceiver (53b) configured to transmit an RF warning signal (59) in response to one of a malfunction in said wireless device (53) and a detection of a security violation committed by a passenger using said wireless device (53).

10. A method of providing security and passenger-convenience in a public transportation terminal (10), said method comprising the steps of:

acquiring passenger data at check-in time;

entering said acquired passenger data into a database (51) associated with said public transportation terminal (10);

issuing said passenger a wireless device (53) at said check-in time;

transferring said acquired passenger data from said database (51) to said

passenger issued wireless device (53);

optically transmitting positioning data (60) and passenger convenience data (60) to said passenger issued wireless device (53);

generating an audio and/or visual signal when said passenger commits a security violation detectable by said passenger issued wireless device (53); and

transmitting a radio frequency (RF) warning signal (59) from said issued wireless device (53) when said wireless device (53) detects said security violation.

11. The method of Claim 10, wherein said security violation is one of a passenger entering an unauthorized area or said passenger arriving at an incorrect terminal gate.

12. The method of Claim 10, wherein said RF warning signal (59) is transmitted to a central security station (56).

13. The method of Claim 10, wherein said wireless device (53) includes an optical RF transceiver (53a).

14. The method of Claim 10, further comprising the step of encrypting said acquired passenger data (60) from said database (51).

15. The method of Claim 10, wherein said passenger data acquired at check-in time includes at least one positive passenger identification means, passenger personal data and passenger ticket information.

16. The method of Claim 10, wherein said passenger convenience data includes delayed or missed flight arrangements, changes of flight schedule and passenger guidance information.

17. The method of Claim 10, further comprising the step of periodically changing a security code for transmitting the optically transmitted positioning data (60).